

Appendix A

**ADEM Closure Assessment Report for Parcel 16(7),
Former Gas Station,
Building 1394, at Former Motor Pool Area 1300,
Parcel 148(7), Anomaly A-1(2)**

ADEM UST CLOSURE SITE ASSESSMENT REPORT

(Use a Separate form for a group of tanks in each tank pit)

FACILITY I.D. NO.:	NA	DATE OF THIS REPORT:	8/3/00
<hr/>		<hr/>	
INCIDENT NO. (If applicable).	UST ____ - ____ - ____	UST OWNER:	U.S. Army
FACILITY COUNTY:	Calhoun	ADDRESS:	Ft. McClellan Anniston, AL
FACILITY NAME:	Parcel 16	CONTACT NAME:	
LOCATION:	A-1(2)	CONTACT PHONE #:	
ADDRESS:	Ft. McClellan Anniston, AL		

NAME OF CONTRACTOR USED TO CLOSE (REMOVE) TANK:	IT Corporation
NAME OF CONSULTANT CONDUCTING ASSESSMENT:	IT Corporation
NAME OF LABORATORY USED:	Severn Trent Laboratories

PRIOR TO BEGINNING CLOSURE, THE CONTRACTOR SHOULD BECOME FAMILIAR WITH ALL CLOSURE PROCEDURES IN AMERICAN PETROLEUM INSTITUTE (API) BULLETIN 1604, "REMOVAL AND DISPOSAL OF USED UNDERGROUND PETROLEUM STORAGE TANKS" AND API BULLETIN 2015 "CLEANING PETROLEUM STORAGE TANKS". THESE API BULLETINS ARE AVAILABLE FROM THE AMERICAN PETROLEUM INSTITUTE.

NUMBER OF TANKS CLOSED:	<u>NONE (none present)(previously removed; no record)</u>
NUMBER OF TANKS REMAINING AT SITE:	<u>NONE</u>
CLOSURE DATE:	<u>8/3/00 (piping)</u>

UNIQUE TANK #:

TANK SIZE:

TANK CAPACITY:

TANK AGE:

DATE TANK LAST USED:

SUBSTANCE STORED:

TYPE OF PRODUCT PIPING:

(Pressurized/Suction)

FARM TANK:

HEATING OIL TANK:

<u>UNK</u>	<u>UNK</u>			
<u>UNK</u>	<u>UNK</u>			
<u>5000-GAL</u>	<u>5000-GAL</u>			
<u>UNK</u>	<u>UNK</u>			
<u>UNK</u>	<u>UNK</u>			
<u>UNK</u>	<u>UNK</u>			
<u>STEEL</u>	<u>STEEL</u>			
<u>UNK</u>	<u>UNK</u>			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1. COMPLETE THE FOLLOWING SECTION FOR ALL CLOSURES:

a. Provide the results of a 500 ft. survey for domestic water supply wells in the following table and place their locations on the attached site map:

Name of Owner of Domestic Water Supply Well	Distance from UST Site	Depth of Well	Status: Active or Inactive?
NONE	NA	NA	NA

b. Provide the results of a 1,000 ft. survey for public water supply wells in the following table and place their locations on the attached site map:

Name of Owner of Public Water Supply Well	Distance from UST Site	Depth of Well	Status: Active or Inactive?
NONE	NA	NA	NA

c. Is the UST site located in a delineated wellhead protection or source water area?

YES

☐

NO

☒

d. Are there any public water supply surface water intakes within 500 ft. of the UST site?

YES

☐

NO

☒

If yes, locate the intake on the attached site map.

NOTE: If an active domestic water supply well or an active public water supply well is located within 500 ft. or 1,000 ft. respectively of the UST site, or if the answer to 1c. or 1d. is Yes, the Department may require groundwater sampling to occur at the UST site. If the groundwater sampling is not performed by the owner/operator during the closure site assessment, the Department may require that groundwater sampling occur as part of a Preliminary Investigation.

Groundwater sampling remains a requirement of the closure site assessment when shallow groundwater is present or when performing an in-place closure site assessment.

e. Indicate the current on-site land use and the most likely future land use:

Current On-Site Land Use		Most Likely Future On-Site Land Use	
Residential	<input type="checkbox"/>	Residential	<input type="checkbox"/>
Commercial	<input type="checkbox"/>	Commercial	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>	Other	<input checked="" type="checkbox"/>
Describe: Military Installation (being closed)		Describe: Transfer to National Guard	

ADEM UST CLOSURE SITE ASSESSMENT FORM

f. Describe the current off-site land use within 500 ft of the UST site. State whether the area, in general, is residential, commercial, mixed residential/commercial or other:

North:	Mixture of former residential & commercial facilities associated with military installation	
	Northeast:	
	Northwest:	
South:	Mixture of former residential & commercial facilities associated with military installation	
	Southeast:	
	Southwest:	
West:	Mixture of former residential & commercial facilities associated with military installation	
East:	Mixture of former residential & commercial facilities associated with military installation	

COMPLETE THE FOLLOWING SECTIONS AS APPROPRIATE BASED ON THE TYPE OF CLOSURE CONDUCTED:

2. TANK CLOSURE BY REMOVAL: Tanks previously removed, not found during investigative dig based on geophysical information.

- a. Attach a topographic map showing the location of the facility and a general site map showing the area surrounding the UST site.
- b. Attach plan and sectional views of the excavation and include the following:
 1. All appropriate excavation dimensions.
 2. All soil sample locations and depths using an appropriate method of identification.
 3. Location of areas of visible contamination.
 4. Former location of tank(s), including depth, with tank Identification Number.

- | | | |
|--|-------------------------------------|--------------------------|
| | YES | NO |
| c. Is the groundwater more than 5 feet below the bottom of the excavation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If no, provide the depth from the ground surface to the groundwater table. | Feet: | _____ |

Indicate method used to determine water table depth:

- | | | |
|---|-------------------------------------|--------------------------|
| | YES | NO |
| 1. Excavation extended 5 feet below base of pit: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Boring or monitoring well: | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Topographic features (Method must be approved by ADEM prior to use): | <input type="checkbox"/> | <input type="checkbox"/> |

- | | | |
|--|-------------------------------------|--------------------------|
| | YES | NO |
| d. Was there a notable odor found in the excavation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

If yes,

- | | |
|--|--------------------------|
| (1) The odor strength was (mild) (strong) (other) describe: | Mild |
| (2) The odor indicates what type of product: (gasoline)(diesel) (waste oil) (kerosene) (other) describe: | Possible mixture of all. |

- | | | |
|---------------------------------------|--------------------------|-------------------------------------|
| | YES | NO |
| e. Was there water in the excavation? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If yes, how was it handled?

- | | | |
|--|--------------------------|--------------------------|
| | YES | NO |
| 1. One time discharge to sanitary sewer with local approval? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Hauled to facility capable of treating constituents of petroleum products in water? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Hauled to local POTW with local approval? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Treated on-site with NPDES approved discharge? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Other? Explain: | _____ | |

ADEM UST CLOSURE SITE ASSESSMENT FORM

- f. Was free product found in the excavation? YES ☐ NO ☒

If yes,

1. How was free product handled? Describe: _____
2. What was the measured thickness of free product? _____

- g. Were visible holes noted in the tank(s)? YES ☐ NO ☒

If yes,

Indicate which tanks(s) by the Unique Tank Number: _____

Also, describe the location(s) and provide general description as to the size and number of holes for above noted tanks, (Example: 3 square feet of pinholes or 3 inch diameter hole):

No tank found. Anomaly investigated (suspected as potential UST) was determined to be 2"-diameter steel Product/Vent piping (or possible remote tank fill piping). The pipe ran east to west for approximately 25-ft. Both ends were uncapped and the piping was buried approximately 2.5' below grade.

- h. Describe the soil type and thickness of all soil layers encountered in the excavation:

Brownish-red silty, sandy, gravelly CLAYS (backfill). Excavation dimensions:

Approx. 3' wide X 25' long X 3' deep, to expose entire length of piping.

- i. Was the excavation backfilled? YES ☐ NO ☒

If yes, provide the date of backfilling: _____

DO NOT BACKFILL WITH MATERIAL THAT HAS OR POTENTIALLY HAS A TPH OF GREATER THAN 100 PPM!

3. TANK CLOSURE WITHOUT REMOVAL(CLOSED IN-PLACE): N/A

- a. Attach a topographic map showing the location of the facility and a general site map showing the area surrounding the UST site.
- b. Attach plan and sectional views of the site and include the following:
 1. Location of the tank(s) including depth,
 2. Location of tank(s) with respect to other tanks, if applicable,
 3. Soil boring locations and depths at which soil samples were taken,
 4. Boring logs.
- c. Attach groundwater sampling data, if required based on depth to groundwater.

ADEM UST CLOSURE SITE ASSESSMENT FORM

- d. Is the groundwater more than 5 feet below the bottom of the tank? YES ☐ NO ☐

Provide the depth from the ground surface to the groundwater table.

Feet: _____

Refer to Closure Site Assessment Guidance (page 11) for further details regarding requirements for determining groundwater elevation.

- e. Was there a notable odor found in the bore holes? YES ☐ NO ☐

If yes,

(1) The odor strength was (mild) (strong) (other) describe: _____

(2) The odor indicates what type of product: (gasoline) (diesel) (waste oil) (kerosene) (other) describe: _____

- f. Was free product found in the bore holes? YES ☐ NO ☐

If yes,

1. How was free product handled? Describe: _____

2. What was the measured thickness of free product? _____

- g. Describe the soil type and thickness of all soil layers encountered in the bore holes and provide boring logs:

- h. Specify the inert solid material used to fill the tank(s):

- i. Provide the date the tank(s) were filled: _____

- j. Were the bore holes properly sealed with bentonite/soil? YES ☐ NO ☐

If yes, provide the date: _____

4. PRODUCT PIPING CLOSURE BY REMOVAL:

- a. Attach a topographic map showing the location of the facility and a general site map showing the area surrounding the UST site.

- b. If the piping was longer than 10 feet, attach plan and sectional views of the piping trench and include the following:

1. All appropriate excavation dimensions and length of piping,
2. All soil sample locations and depths using an appropriate method of identification.
3. Location of areas of visible contamination.

- c. Was the piping purged of product prior to closure? YES ☐ NO ☒

ADEM UST CLOSURE SITE ASSESSMENT FORM

If yes, was the product properly disposed of?

☐☐

YES

NO

d. Is the groundwater more than 5 feet below the bottom of the piping trench?

☒☐

If no, provide the depth from the ground surface to the groundwater table.

Feet: _____

Indicate method used to determine water table depth:

YES

NO

1. Excavation extended 5 feet below base of trench:

☐☐

2. Boring or monitoring well:

☐☐

3. Topographic features (Method must be approved by ADEM prior to use):

☐☐

YES

NO

e. Was there a notable odor found in the piping trench?

☒☐

If yes,

(1) The odor strength was (mild) (strong) (other)
describe:

Mild

(2) The odor indicates what type of product:
(gasoline) (diesel) (waste oil) (kerosene) (other)
describe:

Possible mix of all.

YES

NO

f. Was there water in the piping trench?

☐☒

If yes, how was it handled?

YES

NO

1. One time discharge to sanitary sewer with local approval?

☐☐

2. Hauled to facility capable of treating constituents of petroleum products in water?

☐☐

3. Hauled to local POTW with local approval?

☐☐

4. Treated on-site with NPDES approved discharge?

☐☐

5. Other? Explain:

YES

NO

g. Was free product found in the piping trench?

☐☒

If yes,

1. How was free product handled? Describe: _____

2. What was the measured thickness of free product? _____

ADEM UST CLOSURE SITE ASSESSMENT FORM

- h. Were visible holes noted in the piping? YES ☒ NO ☐

If yes, indicate the location(s) and provide a general description as to the size and number of holes:

Approx. 25' long, 2"-diameter steel piping trending westward from an apparent old tank location
(potentially a remote fill). Was removed for disposal as scrap.

- i. Describe the soil type and thickness of all soil layers encountered in the piping trench:
Brownish-red silty, gravelly, clayey SAND (backfill)

- j. Was the piping trench backfilled? YES ☐ NO ☒

If yes, provide the date of backfilling: _____

DO NOT BACKFILL WITH MATERIAL THAT HAS OR POTENTIALLY HAS A TPH OF GREATER THAN 100 PPM!

5. PRODUCT PIPING CLOSURE WITHOUT REMOVAL (CLOSED IN-PLACE): N/A

- a. Attach a topographic map showing the location of the facility and a general site map showing the area surrounding the UST site.

- b. Attach plan and sectional views of the site and include the following:

1. Location of the piping including depth,
2. Location of piping with respect to tank(s), if applicable.
3. Soil boring locations and depth at which soil samples were taken,
4. Boring logs.

- c. Attach groundwater sampling data, if required based on depth to groundwater.
Refer to Closure Site Assessment Guidance for further details regarding requirements for groundwater sampling.

- d. Was the piping purged of product prior to closure? YES ☐ NO ☐
If yes, was product properly disposed of? ☐ ☐

- e. Was the piping capped? YES ☐ NO ☐

- f. Is the groundwater more than 5 feet below the bottom of the excavation? YES ☐ NO ☐

Provide the depth from the ground surface to the groundwater table.

Feet: _____

Refer to Closure Site Assessment Guidance (page 11) for further details regarding requirements for determining groundwater elevation.

- g. Was there a notable odor found in the bore holes? YES ☐ NO ☐

If yes,

ADEM UST CLOSURE SITE ASSESSMENT FORM

(1) The odor strength was (mild) (strong) (other)
describe: _____

(2) The odor indicates what type of product:
(gasoline) (diesel) (waste oil) (kerosene) (other)
describe: _____

h. Was free product found in the bore holes? YES NO
☐ ☐

If yes,

1. How was free product handled? Describe: _____

2. What was the measured thickness of free product? _____

i. Describe the soil type and thickness of all soil layers encountered in the bore holes and provide boring logs:

j. Were the bore holes properly sealed with bentonite/soil? YES NO
☐ ☐
If yes, provide the date: _____

6. GROUNDWATER SAMPLING (If required by attached closure guidelines):

N/A

a. Indicate the following on the plan and section views required by Section 2.b., 3.b, 4.b, or 5.b.
above:

1. The location and depth of the 1 up-gradient and 3 down-gradient borings or monitoring wells.
(Monitoring wells in lieu of borings are not required, but may be desirable in certain situations.)

2. The most probable direction of groundwater flow. State basis for determining direction:

b. Was a monitoring well used? YES NO
☐ ☐

If yes, attach a schematic drawing of the well(s) and all boring logs.

ADEM UST CLOSURE SITE ASSESSMENT FORM

c. SUMMARY OF GROUNDWATER SAMPLING RESULTS: N/A

Date of Sampling: _____

Boring or MW #:							
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Benzene							
Ethylbenzene							
Toluene							
Xylenes							
MTBE							
Anthracene							
Benzo(a)anthracene							
Benzo(a)pyrene							
Benzo(b) fluoranthene							
Benzo(k)fluoranthene							
Benzo(g,h,i)perylene							
Chrysene							
Fluoranthene							
Fluorene							
Naphthalene							
Phenanthrene							
Pyrene							
Lead							

Note: Attach additional tables as needed based on number of groundwater samples or variations in sampling dates.

- d. Attach the original chain of custody record (**copies are not acceptable**) and the original laboratory data sheet (**copies are not acceptable**) for each sample.

7. SUMMARY OF SOIL ANALYTICAL DATA

a. Provide the analytical data obtained from the site in the following tables:

TANK PIT SAMPLES: N/A

Date of
Sampling: _____

Sample #:							
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
<u>TPH OPTION:</u>							
TPH							
Lead							
<u>COC OPTION:</u>							
Benzene							
Ethylbenzene							
Toluene							
Xylenes							
MTBE							
Anthracene							
Benzo(a)anthracene							
Benzo(a)pyrene							
Benzo(b) fluoranthene							
Benzo(k)fluoranthene							
Benzo(g,h,i)perylene							
Chrysene							
Fluoranthene							
Fluorene							
Naphthalene							
Phenanthrene							
Pyrene							
Lead							

Note: Attach additional tables as needed based on number of soil samples or variations in sampling dates.

ADEM UST CLOSURE SITE ASSESSMENT FORM

PIPING & DISPENSER SAMPLES:

Date of **7/25/00**
 Sampling: _____

Sample #:	LD0008	LD0009					
	8' from E end	8' from W end					
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
TPH OPTION:							
TPH							
Lead							
COC OPTION:							
Benzene	3.6	ND					
Ethylbenzene	37	3.2					
Toluene	71	ND					
Xylenes	250	12					
MTBE							
Acenaphthene	ND	ND					
Acenaphthylene	ND	ND					
Anthracene	ND	ND					
Benzo(a)anthracene	2.0	1.5					
Benzo(a)pyrene	2.5	2.1					
Benzo(b) fluoranthene	1.6	1.1					
Benzo(k)fluoranthene	1.5	0.93					
Benzo(g,h,i)perylene	ND	0.66					
Chrysene	2.5	2.0					
Dibenz(a,h)anthracene	ND	ND					
Fluoranthene	8.5	7.8					
Fluorene	3.7J	1.7J					
Indeno(1,2,3-cd)pyrene	ND	0.82					
Naphthalene	20	2.4J					
Phenanthrene	12	4.8J					
Pyrene	4.7	4.1					
Lead	15.9	18.8					

J – Estimated Result. Result is less than reporting limit.

ND – Analyte not detected above the method detection limit.

Note: Attach additional tables as needed based on number of soil samples or variations in sampling dates.

- b. Attach the original chain of custody record (copies are not acceptable) and the original laboratory data sheet (copies are not acceptable) for each sample.

ADEM UST CLOSURE SITE ASSESSMENT FORM

- e. Indicate current method and location of soil management and/or treatment prior to final disposal:

- f. Check the method of soil disposal used or to be used:

- ☐ Return to the excavation pit only when TPH is less than or equal to 100 ppm and depth of groundwater is greater than 5 feet from the base of the pit.
- ☐ Spread in a thin layer (6" or less) on site only when TPH is less than or equal to 100 ppm
- ☒ Disposal in a landfill (See attached "Guidelines for the Disposal of Non-Hazardous Petroleum Contaminated Wastes").
- ☐ Incineration.
- ☐ Thermal volatilization.
- ☐ Recycling facility
- ☐ Other _____

- g. If soil was disposed of prior to the submittal of this form, indicate the final destination below and attach copies of invoices, receipts, and "certificate of burn" (if soil was incinerated):

Three Corners Regional Landfill, 2205 County Rd 6, Piedmont, Alabama

Soil from Parcels 16(7), 132(7), and 137(7) was disposed of at the same time,
as indicated on the attached manifest.

9. TANK CLEANING: N/A

- a. The tank(s) were cleaned in accordance with American Petroleum Institute (API) Bulletin 2015 "Cleaning Petroleum Storage Tanks"?

YES

☐

NO

NA

If no, describe how tank(s) were cleaned:

No tanks were identified during investigative dig.

- b. Provide an estimate of the volume of sludge removed from the tank:

NA

Gallons

- c. Indicate the final destination of the sludge and attach invoices or receipts:

10. ATTACHMENTS

Attach the following to the closure form in the following order as applicable to the type of closure site assessment performed. Check each box to indicate that a particular map or information is attached to the closure site assessment form. The section of the closure site assessment form that indicates the required attachment is shown.

<input checked="" type="checkbox"/>	Topographic Map showing location of site (Section 2.a., 3.a., 4.a., & 5.a.)
<input checked="" type="checkbox"/>	Area map showing general location of the site. Include land use on-site and within 500' of site. (Section 1)
<input type="checkbox"/>	Include locations of domestic and public water supply wells, and surface water intakes (Section 1)
<input checked="" type="checkbox"/>	Plan and sectional views of the site including the following: (Section 2.b., 3.b., 4.b., & 5.b.)
<input type="checkbox"/>	Location of the closed tanks and piping including depth. Include any remaining tanks or piping at site. Include tank identification numbers.
<input type="checkbox"/>	Excavation dimensions of the tank system
<input checked="" type="checkbox"/>	Locations of soil samples taken for piping and tank which includes the analytical results.
<input type="checkbox"/>	Location of areas of visible contamination
<input type="checkbox"/>	Location of any stockpiled excavated soil
<input type="checkbox"/>	Location of soil borings for an in-place closure
<input type="checkbox"/>	The location and depth of the one up-gradient and 3 down-gradient borings or monitoring wells (Section 6.a.)
<input type="checkbox"/>	Map illustrating the most probable direction of groundwater flow (Section 6.a.)
<input type="checkbox"/>	Schematic diagrams of the monitoring wells installed (Section 6.b.)
<input type="checkbox"/>	Boring logs of soil borings (Section 3.b., 5.b. & 6.b.)
<input type="checkbox"/>	Site Classification Checklist
<input type="checkbox"/>	Invoices and/or receipts for sludge disposal (Section 9.c.)
<input checked="" type="checkbox"/>	Invoices, manifests and certificates of burn or disposal for soil disposal (Section 8.f.)

<input checked="" type="checkbox"/>	Attach the original chain of custody record (copies are not acceptable) for each sample which includes at least the following: (Sections 6.d., 7.b., & 8.c.)
<input checked="" type="checkbox"/>	Sample identification number,
<input checked="" type="checkbox"/>	Date and time sample was taken,
<input checked="" type="checkbox"/>	Name and title of person collecting sample (see certification requirement on page 15 of this form),
<input checked="" type="checkbox"/>	Type of sample (soil or water),
<input checked="" type="checkbox"/>	Type of sample container,
<input checked="" type="checkbox"/>	Method of preservation,
<input checked="" type="checkbox"/>	Date and time sample was relinquished,
<input checked="" type="checkbox"/>	Person relinquishing sample,
<input checked="" type="checkbox"/>	Date and time sample was received by lab,
<input checked="" type="checkbox"/>	Person receiving sample at lab.

<input checked="" type="checkbox"/>	Attach the original laboratory data sheet (copies are not acceptable) which includes at least the following: (Sections 6.d., 7.b., & 8.c.)
<input checked="" type="checkbox"/>	A sample identification number which can be cross referenced with the soil sample locations indicated on the plan and sectional views required by Section 2.b., 3.b., 4.b., or 5.b. above
<input checked="" type="checkbox"/>	The sample analytical results with appropriate units,
<input checked="" type="checkbox"/>	The method used to analyze each sample,
<input checked="" type="checkbox"/>	The date and time the sample was analyzed,
<input checked="" type="checkbox"/>	The person analyzing the sample.

11. SIGNATURES

This form should be completed, signed, and returned, along with any other pertinent information, to the following address:

The Alabama Department of Environmental Management
Groundwater Branch
Post Office Box 301463
Montgomery, AL 36130-1463
(334) 270-5655

INCOMPLETE FORMS WILL BE RETURNED FOR CORRECTION.

Name of person taking soil and/or groundwater samples: James R. Messer

Company: IT Corporation

Telephone Number: 256-848-3499

I certify under penalty of law that I have obtained representative soil and/or groundwater samples using accepted sampling procedures.

Signature: _____ Date: _____

Either a Geologist or an Alabama Registered Professional Engineer must sign this form:

I certify under penalty of law that I have performed this closure site assessment in accordance with accepted soil and groundwater investigation practices; I am either a Geologist or an Alabama Registered Professional Engineer; I am experienced in soil and groundwater investigations; and the information I have submitted, to the best of my knowledge and belief, is true, accurate, and complete.

Signature of Geologist: _____ Date: _____

Signature of Alabama Registered Professional Engineer: David B. Tester, P.E. Date: 10/9/01

Alabama P.E. Registration Number: 23633

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Signature of Tank Owner: _____ Date: _____

ADEM UST CLOSURE SITE ASSESSMENT FORM

FOR ADEM USE ONLY:

Reviewed By: _____ Date: _____

COMMENTS:

[illegible]

FORM 1133
11/05/97

FOR ADEM OFFICE USE ONLY

TO: Air Division FROM: UST Compliance Section

MEMORANDUM

January 28, 1991

**ADEM UST CLOSURE
TOTAL POTENTIAL VOC EMISSIONS CALCULATIONS**

FACILITY I.D. NO.: NA DATE OF THIS REPORT: 8/3/00

INCIDENT NO. UST - - UST OWNER: U.S. Army

(If applicable).

FACILITY COUNTY: Calhoun ADDRESS: Ft McClellan
Anniston, AL

FACILITY NAME: Parcel 16 CONTACT NAME:

LOCATION: A-1(2) CONTACT PHONE #:

ADDRESS: Ft. McClellan
Anniston, AL

Name of Consultant who performed calculations: James R. Messer

Consultant's Phone Number: 256-848-3499

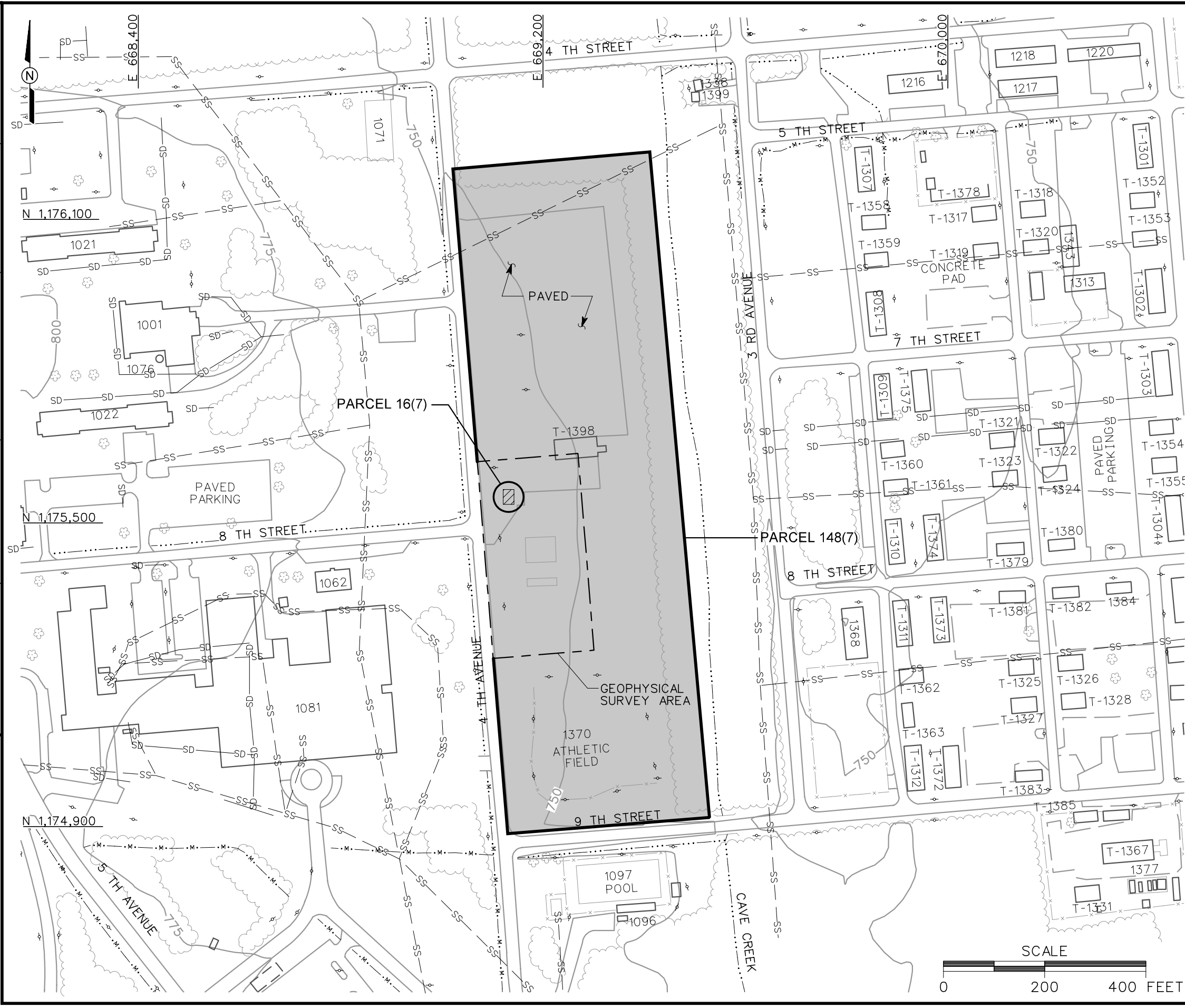
	a	ppm x	b	cyds x .002 =	c	lbs. VOC emissions
Sample 1	<u>490</u>	ppm x	<u>8.5</u>	cyds x .002 =	<u>8.33</u>	lbs. VOC emissions
Sample 2	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 3	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 4	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 5	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 6	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 7	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 8	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 9	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 10	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 11	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 12	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 13	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 14	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions
Sample 15	<u> </u>	ppm x	<u> </u>	cyds x .002 =	<u> </u>	lbs. VOC emissions

TOTAL POTENTIAL EMISSIONS = 8.33 lbs. VOC emissions

*** NOTE - If more samples are taken than indicated on this form, please attach additional pages as necessary.**

This form must be completed and submitted with the ADEM UST Closure Site Assessment Report Form.

FIGURES



LEGEND

UNIMPROVED ROADS AND PARKING

PAVED ROADS AND PARKING

BUILDING

TOPOGRAPHIC CONTOURS
(CONTOUR INTERVAL - 25 FOOT)

TREES / TREELINE

PARCEL BOUNDARY

EXTENT OF GEOPHYSICAL SURVEY

SURFACE DRAINAGE / CREEK

MANMADE SURFACE DRAINAGE
FEATURE

FENCE

UTILITY POLE

SANITARY SEWER LINE

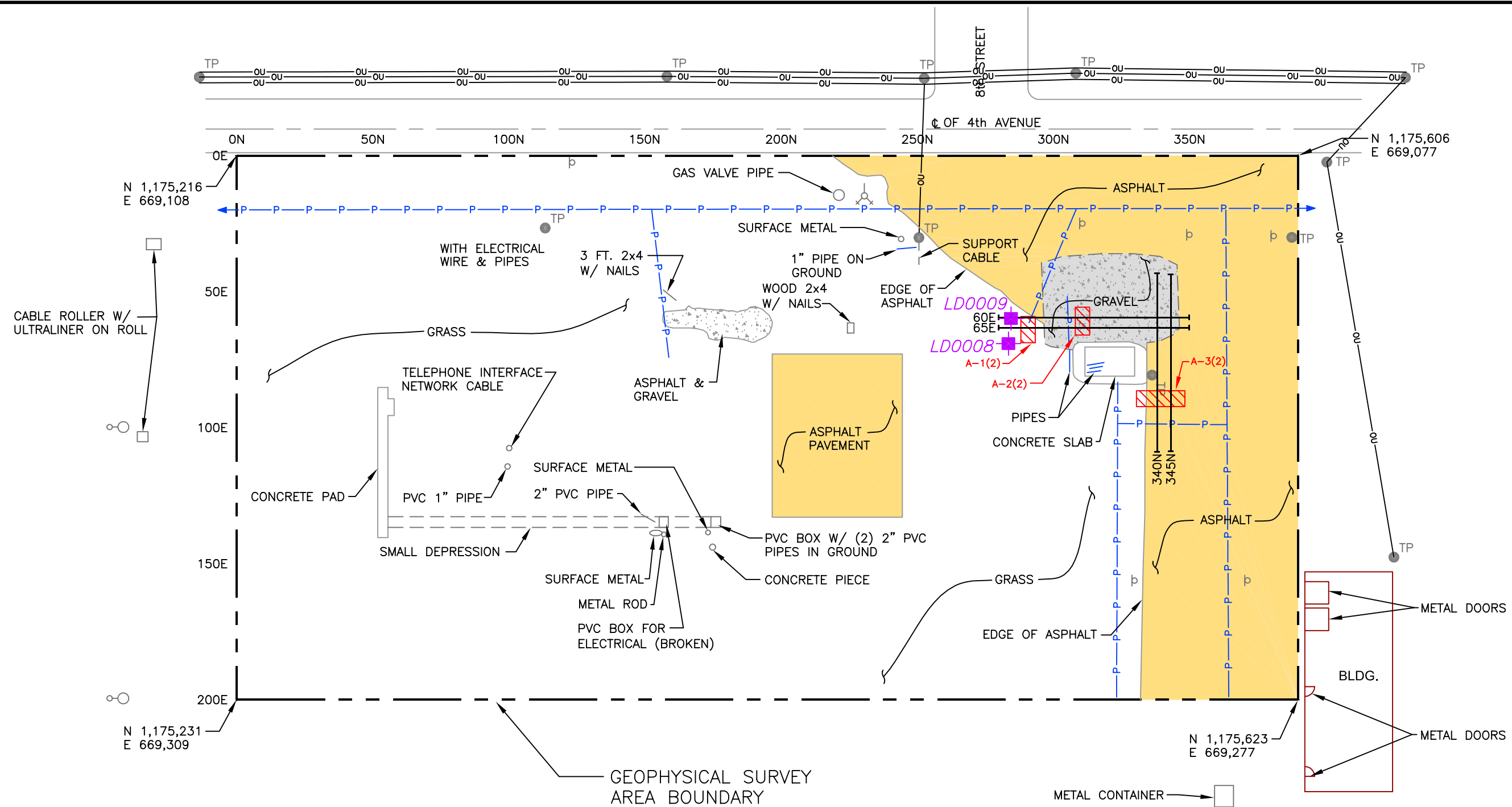
STORM DRAINAGE LINE

FIGURE A-1

SITE MAP, PARCEL 16(7)
FORMER GAS STATION,
BUILDING 1394
AT FORMER MOTOR POOL 1300
PARCEL 148(7)
U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION

A Member of The IT Group



LEGEND

- GEOPHYSICAL ANOMALY
- A-1(2)
- TP TELEPHONE POLE
- LIGHT POLE
- METAL SIGN POST
- FIRE HYDRANT
- OU OVERHEAD UTILITIES

- LOCATION OF BURIED PIPE OR UTILITY
- GPR PROFILES PRESENTED
- 65E
- N 1,175,216 E 669,108 ALABAMA EAST STATE PLANE COORDINATES (NAD83)
- SOIL SAMPLE LOCATION

NOTES: 1) LOCATIONS OF FEATURES OUTSIDE SURVEY AREA ARE APPROXIMATE

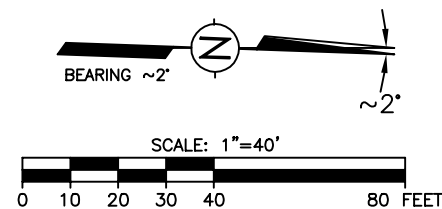


FIGURE A-2

SITE MAP WITH SAMPLE LOCATIONS AND
 GEOPHYSICAL INTERPRETATION
 FOR PARCEL 16(7), FORMER GAS STATION,
 BUILDING 1394, AT FORMER MOTOR POOL
 AREA 1300, PARCEL 148(7)

U.S. ARMY CORPS OF ENGINEERS
 MOBILE DISTRICT
 FORT McLELLAN
 CALHOUN COUNTY, ALABAMA
 Contract No. DACA21-96-D-0018

UST INVESTIGATION PHOTOGRAPHS

UST INVESTIGATION

**Former Gas Station Building 1394, Parcel 16(7) at Former Motor Pool Area 1300, Parcel 148(7)
Project No. 783149; Task Order CK08; Modification No. 2; Contract Number DACA21-96-D-0018**



Photo 1: Anomaly A-1(2) pre-dig conditions. Facing east.



Photo 2: Anomaly A-1(2). West end of trench showing piping. Facing west.



Photo 3: Anomaly A-1(2). Trench and exposed piping. Facing east.

UST INVESTIGATION

**Former Gas Station Building 1394, Parcel 16(7) at Former Motor Pool Area 1300, Parcel 148(7)
Project No. 783149; Task Order CK08; Modification No. 2; Contract Number DACA21-96-D-0018**



Photo 4: Anomaly A-1(2). Trench and exposed piping with covered soil stockpile. Facing east.

ANALYTICAL RESULTS

H0G260167 / UST16A01 Analytical Report.....	1
Sample Receipt Documentation.....	36
Invoice	43
Total # of Pages	43

**SEVERN
TRENT
SERVICES**

STL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947

Tel: 865-291-3000
Fax: 865-584-4315
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 783149

FIMC

Lot #: H0G260167

Duane Nielsen

**IT Corp - Ft. McClellan
312 Directors Drive
Knoxville, TN 37923**

SEVERN TRENT LABORATORIES, INC.



John Reynolds
Project Manager

August 7, 2000

SAMPLE SUMMARY

H0G260167

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DGTFK	001	LD0008	07/25/00	13:30
DGTFQ	002	LD0009	07/25/00	13:45
DGTG2	003	LD0015	07/25/00	08:45
DGTG4	004	LD0016	07/25/00	09:00
DGTGA	005	LD8001	07/25/00	09:00
DGTGK	006	LD8002	07/25/00	09:15

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

ANALYTICAL METHODS SUMMARY

H0G260167

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
Extractable Petroleum Hydrocarbons	SW846 8015B
Paint Filter Test	SW846 9095
Polynuclear Aromatic Hydrocarbons by HPLC	SW846 8310
Total Residue as Percent Solids	MCAWW 160.3 MOD
Volatile Petroleum Hydrocarbons	SW846 8015B
Volatiles by GC	SW846 8021B

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

PROJECT NARRATIVE

HOG260167

The results reported herein are applicable to the samples submitted for analysis only.

The original chain of custody documentation is included with this report.

Sample Receipt

There were no problems with the condition of the samples received.

The samples associated with this lot were shipped directly from the collection site to STL Tampa East.

Subcontract

The following analyses were performed by STL Tampa East, 5910 Breckenridge Parkway, Tampa, FL 33601: Percent Solids (MCAWW 160.3 MOD), Gasoline and Diesel Range Organics (SW846 8015B), Paint Filter Test (SW846 9095), Polynuclear Aromatic Hydrocarbons (SW846 8310) and BTEX (SW846 8021B).

Quality Control

All holding times and QC criteria were met with the following exceptions:

Diesel Range Organics

The surrogate recovery of tetratriacontane in samples LD8001 and LD8002 were outside established control limits. Per Duane Nielsen of The IT Group, the lab was instructed to report the sample results as is.

BTEX

The surrogate recovery of 4-bromofluorobenzene in sample LD0008 was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

This report shall not be reproduced except in full, without the written approval of the laboratory.

STL Knoxville (formerly Quanterra Incorporated), Knoxville Laboratory maintains the following certifications, approvals and accreditations: California ELAP Cert. #2100, Connecticut DPH Cert. #PH-0233, Florida DOH SDWA Cert. #87293, Florida DOH Environmental Water Cert. #E87177, Florida DEP CompQAP #880566, Georgia EPD by US EPA Region IV, Hawaii DOH, Kentucky DEP Lab ID #90101, Maryland DHMH Cert. #277, Massachusetts Cert. #M-TN009, New York DOH Lab #10781, North Carolina DEHNR Cert. #64, North Dakota DOHCL Cert. #R-134, Ohio EPA VAP #CL0059, Oklahoma DEQ ID #9415, South Carolina DHEC Lab ID #84001, Tennessee DOH Lab ID #02014, Tennessee DEC UST, Utah DOH Cust. ID QUAN#, Virginia DGS Lab ID #00165, Washington DOE Lab #C120, Wisconsin DNR Lab ID #998044300, AALA Cert. #486.01, US Army Corps of Engineers, Naval Facilities Engineering Service Center, and USDA Soil Permit #S-3929. This list of approvals is subject to change and does not imply that laboratory certification is available for all parameters reported in this environmental sample data report.

PROJECT NARRATIVE

HOG260167

Polynuclear Aromatic Hydrocarbons

The surrogate recoveries of carbazole in samples LD0008, LD0009, LD0016 were not calculated because the extract was diluted beyond the ability to quantitate a recovery.

The RPDs for several compounds in the laboratory control sample duplicate were outside the established control limits. However, all spike analyte recoveries were acceptable.

This report shall not be reproduced except in full, without the written approval of the laboratory.

STL Knoxville (formerly Quanterra Incorporated), Knoxville Laboratory maintains the following certifications, approvals and accreditations: California ELAP Cert. #2100, Connecticut DPH Cert. #PH-0233, Florida DOH SDWA Cert. #87293, Florida DOH Environmental Water Cert. #E87177, Florida DEP CompQAP #880566, Georgia EPD by US EPA Region IV, Hawaii DOH, Kentucky DEP Lab ID #90101, Maryland DHMH Cert. #277, Massachusetts Cert. #M-TN009, New York DOH Lab #10781, North Carolina DEHNR Cert. #64, North Dakota DOHCL Cert. #R-134, Ohio EPA VAP #CL0059, Oklahoma DEQ ID #9415, South Carolina DHEC Lab ID #84001, Tennessee DOH Lab ID #02014, Tennessee DEC UST, Utah DOH Cust. ID QUAN#, Virginia DGS Lab ID #00165, Washington DOE Lab #C120, Wisconsin DNR Lab ID #998044300, AALA Cert. #486.01, US Army Corps of Engineers, Naval Facilities Engineering Service Center, and USDA Soil Permit #S-3929. This list of approvals is subject to change and does not imply that laboratory certification is available for all parameters reported in this environmental sample data report.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD8001

GC Semivolatiles

Lot-Sample #...: H0G260167-005 Work Order #...: DGTGA102 Matrix.....: SOLID
Date Sampled...: 07/25/00 Date Received...: 07/26/00
Prep Date.....: 07/26/00 Analysis Date...: 07/28/00
Prep Batch #...: 0208576
Dilution Factor: 2
% Moisture.....: 9.5 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Diesel Range Organics	380	22	mg/kg	6.2

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Tetratriacontane	142 *	(25 - 113)

NOTE (S) :

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD8002

GC Semivolatiles

Lot-Sample #....: H0G260167-006 Work Order #....: DGTGK102 Matrix.....: SOLID
Date Sampled....: 07/25/00 Date Received...: 07/26/00
Prep Date.....: 07/26/00 Analysis Date...: 07/28/00
Prep Batch #....: 0208576
Dilution Factor: 1
% Moisture.....: 13 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Diesel Range Organics	30	11	mg/kg	3.2

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetratriacontane	123 *	(25 - 113)

NOTE(S) :

* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: H0G260167 Work Order #...: DGVQT101 Matrix.....: SOLID
MB Lot-Sample #: B0G260000-576
Prep Date.....: 07/26/00
Analysis Date...: 07/28/00 Prep Batch #...: 0208576
Dilution Factor: 1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Diesel Range Organics	ND	10	mg/kg	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Tetratriacontane	98	(25 - 113)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: H0G260167 Work Order #....: DGVQT102-LCS Matrix.....: SOLID
 LCS Lot-Sample#: B0G260000-576 DGVQT103-LCSD
 Prep Date.....: 07/26/00 Analysis Date...: 07/28/00
 Prep Batch #....: 0208576
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
Diesel Range Organics	59.2	64.1	mg/kg	108		SW846 8015B
	59.2	67.2	mg/kg	114	4.8	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
Tetratriacontane	108	(25 - 113)
	109	(25 - 113)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: H0G260167 Work Order #....: DGVQT102-LCS Matrix.....: SOLID
 LCS Lot-Sample#: B0G260000-576 DGVQT103-LCSD
 Prep Date.....: 07/26/00 Analysis Date...: 07/28/00
 Prep Batch #....: 0208576
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Diesel Range Organics	108	(35 - 115)			SW846 8015B
	114	(35 - 115)	4.8	(0-34)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Tetratriacontane	108	(25 - 113)
	109	(25 - 113)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

IT CORP - FT. MCCLELLAN

Client Sample ID: LD8001

GC Volatiles

Lot-Sample #....: HOG260167-005 Work Order #....: DGTGA103 Matrix.....: SOLID
Date Sampled....: 07/25/00 Date Received...: 07/26/00
Prep Date.....: 07/26/00 Analysis Date...: 07/27/00
Prep Batch #....: 0209248
Dilution Factor: 1
% Moisture.....: 9.5 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Gasoline Range Organics	110	5.5	mg/kg	0.47

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
4-Bromofluorobenzene	61	(39 - 163)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD8002

GC Volatiles

Lot-Sample #....: H0G260167-006 Work Order #....: DGTGK103 Matrix.....: SOLID
Date Sampled....: 07/25/00 Date Received...: 07/26/00
Prep Date.....: 07/26/00 Analysis Date...: 07/27/00
Prep Batch #....: 0209248
Dilution Factor: 1
% Moisture.....: 13 Method.....: SW846 8015B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Gasoline Range Organics	ND	5.7	mg/kg	0.49

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
4-Bromofluorobenzene	82	(39 - 163)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: H0G260167
MB Lot-Sample #: B0G270000-248

Work Order #...: DGWCN101

Matrix.....: SOLID

Analysis Date...: 07/26/00

Prep Date.....: 07/26/00

Dilution Factor: 1

Prep Batch #...: 0209248

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Gasoline Range Organics	ND	5.0	mg/kg	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
4-Bromofluorobenzene	77	(39 - 163)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: H0G260167 Work Order #....: DGWCN102-LCS Matrix.....: SOLID
 LCS Lot-Sample#: B0G270000-248 DGWCN103-LCSD
 Prep Date.....: 07/26/00 Analysis Date...: 07/26/00
 Prep Batch #....: 0209248
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCENT RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
Gasoline Range Organics	20.0	16.9	mg/kg	85		SW846 8015B
	20.0	17.8	mg/kg	89	5.3	SW846 8015B
<u>SURROGATE</u>				<u>PERCENT RECOVERY</u>		<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene				90		(39 - 163)
				86		(39 - 163)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: H0G260167 Work Order #....: DGWCN102-LCS Matrix.....: SOLID
 LCS Lot-Sample#: B0G270000-248 DGWCN103-LCSD
 Prep Date.....: 07/26/00 Analysis Date...: 07/26/00
 Prep Batch #....: 0209248
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Gasoline Range Organics	85	(26 - 115)			SW846 8015B
	89	(26 - 115)	5.3	(0-25)	SW846 8015B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	90	(39 - 163)
	86	(39 - 163)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0008

GC Volatiles

Lot-Sample #....: H0G260167-001 Work Order #....: DGTFK104 Matrix.....: SOLID
 Date Sampled....: 07/25/00 Date Received...: 07/26/00
 Prep Date.....: 07/26/00 Analysis Date...: 07/27/00
 Prep Batch #....: 0209451
 Dilution Factor: 25
 % Moisture.....: 9.7 Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	3600	1400	ug/kg	500
Ethylbenzene	37000	1400	ug/kg	610
Toluene	71000	1400	ug/kg	390
Xylenes (total)	250000	1400	ug/kg	1300

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	NC, SRD	(46 - 143)

NOTE (S) :

NC The recovery and/or RPD were not calculated.

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

Results and reporting limits have been adjusted for dry weight.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0009

GC Volatiles

Lot-Sample #....: H0G260167-002 Work Order #....: DGTFQ104 Matrix.....: SOLID
 Date Sampled....: 07/25/00 Date Received...: 07/26/00
 Prep Date.....: 07/26/00 Analysis Date...: 07/28/00
 Prep Batch #....: 0209451
 Dilution Factor: 2
 % Moisture.....: 16 Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Benzene	ND	120	ug/kg	43
Ethylbenzene	3200	120	ug/kg	52
Toluene	ND	120	ug/kg	33
Xylenes (total)	12000	120	ug/kg	110

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
4-Bromofluorobenzene	142	(46 - 143)

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0015

GC Volatiles

Lot-Sample #....: H0G260167-003 Work Order #....: DGTG2104 Matrix.....: SOLID
Date Sampled....: 07/25/00 Date Received...: 07/26/00
Prep Date.....: 07/26/00 Analysis Date...: 07/27/00
Prep Batch #....: 0209451
Dilution Factor: 1
% Moisture.....: 17 Method.....: SW846 8021B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Benzene	ND	60	ug/kg	22
Ethylbenzene	ND	60	ug/kg	27
Toluene	ND	60	ug/kg	17
Xylenes (total)	ND	60	ug/kg	57
		PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS		
4-Bromofluorobenzene	109	(46 - 143)		

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0016

GC Volatiles

Lot-Sample #....: H0G260167-004 Work Order #....: DGTG4104 Matrix.....: SOLID
Date Sampled....: 07/25/00 Date Received...: 07/26/00
Prep Date.....: 07/26/00 Analysis Date...: 07/27/00
Prep Batch #....: 0209451
Dilution Factor: 1
% Moisture.....: 19 Method.....: SW846 8021B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Benzene	ND	62	ug/kg	22
Ethylbenzene	ND	62	ug/kg	27
Toluene	ND	62	ug/kg	17
Xylenes (total)	ND	62	ug/kg	58

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
4-Bromofluorobenzene	100	(46 - 143)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: HOG260167
MB Lot-Sample #: B0G270000-451

Work Order #...: DGXA9101

Matrix.....: SOLID

Analysis Date...: 07/26/00

Prep Date.....: 07/26/00

Dilution Factor: 1

Prep Batch #...: 0209451

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Benzene	ND	50	ug/kg	SW846 8021B
Ethylbenzene	ND	50	ug/kg	SW846 8021B
Toluene	ND	50	ug/kg	SW846 8021B
Xylenes (total)	ND	50	ug/kg	SW846 8021B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
4-Bromofluorobenzene	100	(46 - 143)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: H0G260167 Work Order #....: DGXA9102-LCS Matrix.....: SOLID
 LCS Lot-Sample#: B0G270000-451 DGXA9103-LCSD
 Prep Date.....: 07/26/00 Analysis Date...: 07/26/00
 Prep Batch #....: 0209451
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCENT RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
Benzene	1000	952	ug/kg	95		SW846 8021B
	1000	997	ug/kg	100	4.6	SW846 8021B
Ethylbenzene	1000	1060	ug/kg	106		SW846 8021B
	1000	1050	ug/kg	105	1.0	SW846 8021B
Toluene	1000	996	ug/kg	100		SW846 8021B
	1000	1010	ug/kg	101	1.7	SW846 8021B
m-Xylene & p-Xylene	2000	2130	ug/kg	107		SW846 8021B
	2000	2140	ug/kg	107	0.39	SW846 8021B
o-Xylene	1000	1040	ug/kg	104		SW846 8021B
	1000	1050	ug/kg	105	1.2	SW846 8021B
<u>SURROGATE</u>				<u>PERCENT RECOVERY</u>		<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene				109		(46 - 143)
				110		(46 - 143)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: H0G260167 Work Order #....: DGXA9102-LCS Matrix.....: SOLID
 LCS Lot-Sample#: B0G270000-451 DGXA9103-LCSD
 Prep Date.....: 07/26/00 Analysis Date...: 07/26/00
 Prep Batch #....: 0209451
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Benzene	95	(62 - 128)			SW846 8021B
	100	(62 - 128)	4.6	(0-30)	SW846 8021B
Ethylbenzene	106	(66 - 119)			SW846 8021B
	105	(66 - 119)	1.0	(0-20)	SW846 8021B
Toluene	100	(73 - 123)			SW846 8021B
	101	(73 - 123)	1.7	(0-20)	SW846 8021B
m-Xylene & p-Xylene	107	(70 - 130)			SW846 8021B
	107	(70 - 130)	0.39	(0-20)	SW846 8021B
o-Xylene	104	(70 - 130)			SW846 8021B
	105	(70 - 130)	1.2	(0-20)	SW846 8021B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
4-Bromofluorobenzene	109	(46 - 143)
	110	(46 - 143)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0008

HPLC

Lot-Sample #....: H0G260167-001 Work Order #....: DGTFK101 Matrix.....: SOLID
 Date Sampled....: 07/25/00 Date Received...: 07/26/00
 Prep Date.....: 07/26/00 Analysis Date...: 07/28/00
 Prep Batch #....: 0208575
 Dilution Factor: 100
 % Moisture.....: 9.7 Method.....: SW846 8310

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acenaphthene	ND	5500	ug/kg	550
Acenaphthylene	ND	5500	ug/kg	710
Anthracene	ND	5500	ug/kg	370
Benzo (a) anthracene	2000	550	ug/kg	110
Benzo (a) pyrene	2500	550	ug/kg	93
Benzo (b) fluoranthene	1600	550	ug/kg	86
Benzo (ghi) perylene	ND	550	ug/kg	120
Benzo (k) fluoranthene	1500	550	ug/kg	55
Chrysene	2500	550	ug/kg	97
Dibenz (a, h) anthracene	ND	550	ug/kg	92
Fluoranthene	8500	550	ug/kg	97
Fluorene	3700 J	5500	ug/kg	1000
Indeno (1, 2, 3-cd) pyrene	ND	550	ug/kg	78
Naphthalene	20000	5500	ug/kg	1900
Phenanthrene	12000	5500	ug/kg	1100
Pyrene	4700	550	ug/kg	99
		PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS		
Carbazole	NC, SRD	(17 - 115)		

NOTE (S) :

NC The recovery and/or RPD were not calculated.

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0009

HPLC

Lot-Sample #....: HOG260167-002 Work Order #....: DGTFQ101 Matrix.....: SOLID
 Date Sampled....: 07/25/00 Date Received...: 07/26/00
 Prep Date.....: 07/26/00 Analysis Date...: 07/28/00
 Prep Batch #....: 0208575
 Dilution Factor: 100
 % Moisture.....: 16 Method.....: SW846 8310

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acenaphthene	ND	6000	ug/kg	600
Acenaphthylene	ND	6000	ug/kg	760
Anthracene	ND	6000	ug/kg	390
Benzo (a) anthracene	1500	600	ug/kg	120
Benzo (a) pyrene	2100	600	ug/kg	100
Benzo (b) fluoranthene	1100	600	ug/kg	93
Benzo (ghi) perylene	660	600	ug/kg	130
Benzo (k) fluoranthene	930	600	ug/kg	60
Chrysene	2000	600	ug/kg	100
Dibenz (a, h) anthracene	ND	600	ug/kg	99
Fluoranthene	7800	600	ug/kg	100
Fluorene	1700 J	6000	ug/kg	1100
Indeno (1, 2, 3-cd) pyrene	820	600	ug/kg	83
Naphthalene	2400 J	6000	ug/kg	2000
Phenanthrene	4800 J	6000	ug/kg	1100
Pyrene	4100	600	ug/kg	110
		PERCENT	RECOVERY	
<u>SURROGATE</u>	<u>RECOVERY</u>		<u>LIMITS</u>	
Carbazole	NC, SRD		(17 - 115)	

NOTE (S) :

NC The recovery and/or RPD were not calculated.

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0015

HPLC

Lot-Sample #....: H0G260167-003 Work Order #....: DGTG2101 Matrix.....: SOLID
 Date Sampled....: 07/25/00 Date Received...: 07/26/00
 Prep Date.....: 07/26/00 Analysis Date...: 07/27/00
 Prep Batch #....: 0208575
 Dilution Factor: 1
 % Moisture.....: 17 Method.....: SW846 8310

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acenaphthene	ND	60	ug/kg	6.0
Acenaphthylene	ND	60	ug/kg	7.7
Anthracene	ND	60	ug/kg	4.0
Benzo (a) anthracene	2.0 J	6.0	ug/kg	1.2
Benzo (a) pyrene	24	6.0	ug/kg	1.0
Benzo (b) fluoranthene	2.6 J	6.0	ug/kg	0.94
Benzo (ghi) perylene	4.9 J	6.0	ug/kg	1.3
Benzo (k) fluoranthene	ND	6.0	ug/kg	0.60
Chrysene	3.4 J	6.0	ug/kg	1.1
Dibenz (a,h) anthracene	ND	6.0	ug/kg	1.0
Fluoranthene	8.5	6.0	ug/kg	1.1
Fluorene	ND	60	ug/kg	11
Indeno (1,2,3-cd) pyrene	7.7	6.0	ug/kg	0.84
Naphthalene	ND	60	ug/kg	21
Phenanthrene	ND	60	ug/kg	12
Pyrene	3.2 J	6.0	ug/kg	1.1
		PERCENT	RECOVERY	
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
Carbazole	62	(17 - 115)		

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0016

HPLC

Lot-Sample #....: HOG260167-004 Work Order #....: DGTG4101 Matrix.....: SOLID
 Date Sampled....: 07/25/00 Date Received...: 07/26/00
 Prep Date.....: 07/26/00 Analysis Date...: 07/27/00
 Prep Batch #....: 0208575
 Dilution Factor: 5
 % Moisture.....: 19 Method.....: SW846 8310

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acenaphthene	ND	310	ug/kg	31
Acenaphthylene	ND	310	ug/kg	39
Anthracene	77 J	310	ug/kg	20
Benzo (a) anthracene	80	31	ug/kg	6.2
Benzo (a) pyrene	340	31	ug/kg	5.2
Benzo (b) fluoranthene	200	31	ug/kg	4.8
Benzo (ghi) perylene	140	31	ug/kg	6.8
Benzo (k) fluoranthene	140	31	ug/kg	3.1
Chrysene	170	31	ug/kg	5.4
Dibenz (a,h) anthracene	13 J	31	ug/kg	5.1
Fluoranthene	250	31	ug/kg	5.4
Fluorene	ND	310	ug/kg	56
Indeno (1,2,3-cd) pyrene	150	31	ug/kg	4.3
Naphthalene	ND	310	ug/kg	100
Phenanthrene	ND	310	ug/kg	59
Pyrene	230	31	ug/kg	5.5

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Carbazole	NC,SRD	(17 - 115)

NOTE(S) :

NC The recovery and/or RPD were not calculated.

SRD The surrogate recovery was not calculated because the extract was diluted beyond the ability to quantitate a recovery.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

HPLC

Client Lot #...: HOG260167
 MB Lot-Sample #: B0G260000-575

Work Order #...: DGVQR101

Matrix.....: SOLID

Analysis Date...: 07/27/00

Prep Date.....: 07/26/00

Prep Batch #...: 0208575

Dilution Factor: 1

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Acenaphthene	ND	50	ug/kg	SW846 8310
Acenaphthylene	ND	50	ug/kg	SW846 8310
Anthracene	ND	50	ug/kg	SW846 8310
Benzo(a)anthracene	ND	5.0	ug/kg	SW846 8310
Benzo(a)pyrene	ND	5.0	ug/kg	SW846 8310
Benzo(b)fluoranthene	ND	5.0	ug/kg	SW846 8310
Benzo(ghi)perylene	ND	5.0	ug/kg	SW846 8310
Benzo(k)fluoranthene	ND	5.0	ug/kg	SW846 8310
Chrysene	ND	5.0	ug/kg	SW846 8310
Dibenz(a,h)anthracene	ND	5.0	ug/kg	SW846 8310
Fluoranthene	ND	5.0	ug/kg	SW846 8310
Fluorene	ND	50	ug/kg	SW846 8310
Indeno(1,2,3-cd)pyrene	ND	5.0	ug/kg	SW846 8310
Naphthalene	ND	50	ug/kg	SW846 8310
Phenanthrene	ND	50	ug/kg	SW846 8310
Pyrene	ND	5.0	ug/kg	SW846 8310
		PERCENT	RECOVERY	
<u>SURROGATE</u>	<u>RECOVERY</u>		<u>LIMITS</u>	
Carbazole	74		(17 - 115)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC

Client Lot #....: H0G260167 Work Order #....: DGVQR102-LCS Matrix.....: SOLID
 LCS Lot-Sample#: B0G260000-575 DGVQR103-LCSD
 Prep Date.....: 07/26/00 Analysis Date...: 07/27/00
 Prep Batch #....: 0208575
 Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acenaphthene	333	175	ug/kg	52		SW846 8310
	333	234	ug/kg	70	29	SW846 8310
1-Methylnaphthalene	333	178	ug/kg	53		SW846 8310
	333	237 p	ug/kg	71	29	SW846 8310
Chrysene	33.3	19.9	ug/kg	60		SW846 8310
	33.3	26.7 p	ug/kg	80	29	SW846 8310
Fluorene	333	176	ug/kg	53		SW846 8310
	333	235 p	ug/kg	71	29	SW846 8310
Naphthalene	333	162	ug/kg	49		SW846 8310
	333	215 p	ug/kg	65	28	SW846 8310
Pyrene	33.3	19.1	ug/kg	57		SW846 8310
	33.3	24.6	ug/kg	74	25	SW846 8310
				PERCENT RECOVERY	RECOVERY LIMITS	
SURROGATE				53	(17 - 115)	
Carbazole				71	(17 - 115)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC

Client Lot #....: H0G260167 Work Order #....: DGVQR102-LCS Matrix.....: SOLID
 LCS Lot-Sample#: B0G260000-575 DGVQR103-LCSD
 Prep Date.....: 07/26/00 Analysis Date...: 07/27/00
 Prep Batch #....: 0208575
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	52	(41 - 115)			SW846 8310
	70	(41 - 115)	29	(0-30)	SW846 8310
1-Methylnaphthalene	53	(45 - 115)			SW846 8310
	71 p	(45 - 115)	29	(0-27)	SW846 8310
Chrysene	60	(45 - 115)			SW846 8310
	80 p	(45 - 115)	29	(0-27)	SW846 8310
Fluorene	53	(42 - 115)			SW846 8310
	71 p	(42 - 115)	29	(0-28)	SW846 8310
Naphthalene	49	(28 - 116)			SW846 8310
	65 p	(28 - 116)	28	(0-26)	SW846 8310
Pyrene	57	(46 - 115)			SW846 8310
	74	(46 - 115)	25	(0-50)	SW846 8310

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Carbazole	53	(17 - 115)
	71	(17 - 115)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0008

General Chemistry

Lot-Sample #....: H0G260167-001

Work Order #....: DGTFK

Matrix.....: SOLID

Date Sampled....: 07/25/00

Date Received...: 07/26/00

% Moisture.....: 9.7

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	90.3	0.10	%	MCAWW 160.3 MOD	07/27-07/28/00	0210130

Dilution Factor: 1 MDL.....: 0.10

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0009

General Chemistry

Lot-Sample #...: HOG260167-002

Work Order #...: DGTFQ

Matrix.....: SOLID

Date Sampled...: 07/25/00

Date Received...: 07/26/00

% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	84.0	0.10	%	MCAWW 160.3 MOD	07/27-07/28/00	0210130
		Dilution Factor: 1		MDL.....: 0.10		

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0015

General Chemistry

Lot-Sample #....: HOG260167-003

Work Order #....: DGTG2

Matrix.....: SOLID

Date Sampled....: 07/25/00

Date Received...: 07/26/00

% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	82.9	0.10	%	MCAWW 160.3 MOD	07/27-07/28/00	0210130
		Dilution Factor: 1		MDL.....: 0.10		

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0016

General Chemistry

Lot-Sample #...: HOG260167-004

Work Order #...: DGTG4

Matrix.....: SOLID

Date Sampled...: 07/25/00

Date Received...: 07/26/00

% Moisture.....: 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Solids	81.3	0.10	%	MCAWW 160.3 MOD	07/27-07/28/00	0210130
		Dilution Factor: 1		MDL.....: 0.10		

IT CORP - FT. MCCLELLAN

Client Sample ID: LD8001

General Chemistry

Lot-Sample #....: HOG260167-005

Work Order #....: DGTGA

Matrix.....: SOLID

Date Sampled....: 07/25/00

Date Received...: 07/26/00

% Moisture.....: 9.5

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Paint Filter Test	NO		No Units	SW846 9095	07/26/00	0209111
			Dilution Factor: 1	MDL.....:		
Percent Solids	90.5	0.10	%	MCAWW 160.3 MOD	07/27-07/28/00	0210130
			Dilution Factor: 1	MDL.....: 0.10		

IT CORP - FT. MCCLELLAN

Client Sample ID: LD8002

General Chemistry

Lot-Sample #....: H0G260167-006 Work Order #....: DGTGK Matrix.....: SOLID
Date Sampled....: 07/25/00 Date Received...: 07/26/00
% Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Paint Filter Test	NO		No Units	SW846 9095	07/26/00	0209111
			Dilution Factor: 1	MDL.....:		
Percent Solids	87.5	0.10	%	MCAWW 160.3 MOD	07/27-07/28/00	0210130
			Dilution Factor: 1	MDL.....: 0.10		

Sample Delivery Group
Assignment Form

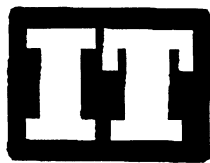
SDG# UST16A01

*	DATE REC'D	LOT#	CLIENT ID	VOA	PAH	PEST	EXP	MET	PCB	PH	DRO	GRO	PAINT
				8021B	8310	8081A	8330	6010B	8082	9045	8015	8015	FILTER
1	7/26/00	H0G260167	LD0008	T	T								
2			LD0009	T	T								
3			LD0015	T	T								
4			LD0016	T	T								
5			LD8001								T	T	T
6			LD8002								T	T	T
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

NC = NORTH CANTON
T = STL TAMPA
D= STL DENVER
WS = STL WEST SACRAMENTO
P = PITTSBURGH
IT = IT CORP KNOX

MATRIX: SOIL
ANALYTICAL DUE: 7-28-00
REPORT DUE: 8-4-00
CLOSED? YES

8/11/008:04 AM



IT CORPORATION

A Member of The IT Group

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

H06260167

Reference Document No: 16-072500-QST

Page 1 of 2

Project Number: 783149

Samples Shipment Date: 25 JUL 2000

Bill To: Duane Nielsen

Project Name: Fort McClellan, SAD TERC

Lab Destination: QUANTERRA - TAMPA

312 Directors Drive

Knoxville TN 37923

Sample Coordinator: Oliver Allen

Lab Contact: Michele Lersch

Report To: Duane Nielsen

312 Directors Drive

Knoxville TN 37923

Turnaround Time: 48 hours
Turn

Project Contact: Randy McBride

Carrier/Waybill No.: Fed Ex 790866030598

Special Instructions: NONE

Possible Hazard Identification:

Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal:

Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

1. Relinquished By
(Signature/Affiliation)

[Signature]

Date: 25 July 00
Time: 1610

1. Received By
(Signature/Affiliation)

Date:
Time:

2. Relinquished By
(Signature/Affiliation)

Date:
Time:

2. Received By
(Signature/Affiliation)

Date:
Time:

3. Relinquished By
(Signature/Affiliation)

Date:
Time:

3. Received By
(Signature/Affiliation)

Date:
Time:

Comments: NONE

48 hour Turn

25476

UST14002

7-28
8-4

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	File CID	Condition On Receipt
DO008	16A1-CS16								
DO009	UST-16A1-CS06-CS-LD0009-REG	25 JUL 2000	13:30	5 g EnCore	3	None except cool to 4 C	BTEx by 8021B	N	
DO009	UST-16A1-CS06-CS-LD0009-REG	25 JUL 2000	13:30	8 oz CWM	1	None except cool to 4 C	PAH's by 8310	N	
DO009	UST-16A1-CS07-CS-LD0009-REG	25 JUL 2000	13:45	5 g EnCore	3	None except cool to 4 C	BTEx by 8021B	N	
DO009	UST-16A1-CS07-CS-LD0009-REG	25 JUL 2000	13:45	8 oz CWM	1	None except cool to 4 C	PAH's by 8310	N	
DO015	UST-16A2-CS06-CS-LD0015-REG	25 JUL 2000	08:45	5 g EnCore	3	None except cool to 4 C	BTEx by 8021B	N	
DO015	UST-16A2-CS06-CS-LD0015-REG	25 JUL 2000	08:45	8 oz CWM	1	None except cool to 4 C	PAH's by 8310	N	
DO016	UST-16A2-CS07-CS-LD0016-REG	25 JUL 2000	09:00	5 g EnCore	3	None except cool to 4 C	BTEx by 8021B	N	
DO016	UST-16A2-CS07-CS-LD0016-REG	25 JUL 2000	09:00	8 oz CWM	1	None except cool to 4 C	PAH's by 8310	N	



IT CORPORATION

A Member of The IT Group

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 16-072500-QST

Page 2 of 2

406260167

Sample No	Sample Name	Sample Date	Sample Time	Container	Preservative	Requested Testing Program	File	CID	Condition On Receipt
LD8001	UST-16A1-SP01-SP-LD8001-REG	25 JUL 2020	14:00	8 oz CWM	1 None except cool to 4 C	Diesel Range Organics by 8015B	N		
LD8001	UST-16A1-SP01-SP-LD8001-REG	25 JUL 2020	14:00	5 g EnCore	3 None except cool to 4 C	Gasoline Range Organics by 8015B	N		
LD8001	UST-16A1-SP01-SP-LD8001-REG	25 JUL 2020	14:00	8 oz CWM	1 None except cool to 4 C	Paint Filter	N		
LD8002	UST-16A2-SP01-SP-LD8002-REG	25 JUL 2020	09:15	5 g EnCore	3 None except cool to 4 C	Gasoline Range Organics by 8015B	N		
LD8002	UST-16A2-SP01-SP-LD8002-REG	25 JUL 2020	09:15	8 oz CWM	1 None except cool to 4 C	Lead by 8010B, Paint Filter	N		
LD8002	UST-16A2-SP01-SP-LD8002-REG	25 JUL 2020	09:15	8 oz CWM	1 None except cool to 4 C	Diesel Range Organics by 8015B	N		

SEVERN TRENT LABS

TAMPA LABORATORY
CONDITION UPON RECEIPT FORMClient (name or ID): KNOXVILLEProject name: HOG 260167Date received: 7/26/00

Lot number: _____

Received by: Carol McNulty CUR completed by: Carol McNulty**Cooler/Shipping Information:**Type: ☒ Cooler ☐ Box ☐ Other (describe) _____

Cooler temperature: Identify the cooler and document the temperature blank or ice water measurement

Cooler ID/Track #					
Temp (°C)	4°				
Cooler ID/Track #					
Temp (°C)					

Other Information:

Any "NO" responses or discrepancies should be explained in the "Comments" section below. If an NCM was initiated, write the NCM number in the appropriate space.

CHECKLIST

	YES	NO	NA	NCM #
1. Were custody seals on shipping container(s) intact? Check "NA" if hand delivered. If "Yes," check one: <input type="checkbox"/> CUSTODY SEAL SAVED <input checked="" type="checkbox"/> UNABLE TO SAVE CUSTODY SEAL	X			
2. Were custody papers properly included with samples?	X			
3. Were custody papers properly filled out (ink, signed, match labels)?	X			
4. Did all bottles arrive in good condition (unbroken)?	X			
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	X			
6. Were correct bottles used for the tests indicated?	X			
7. Were proper sample preservation techniques indicated?	X			
8. Were samples received within holding times? If "No," NCM required.	X			
9. Were all VOA bottles checked for the presence of air bubbles? If air bubbles were found, indicate in comment section.	can		(X)	
10. Were samples in direct contact with wet ice? If "No," check one: <input type="checkbox"/> NO ICE <input type="checkbox"/> BLUE ICE	X			
11. Were the samples received with a temperature blank? RECORD TEMPERATURE ABOVE If "No," check one: <input type="checkbox"/> Unable to determine temp <input type="checkbox"/> Taken from ice/water near samples	X			
12. Was the cooler temperature less than 6°C?	X			
13. Were sample pHs checked and recorded by Sample control? NOTE: VOA samples are checked by laboratory analysts.			X	
14. Were samples accepted into the laboratory?	X			

Comments:Project Manager initials/date reviewed: me 7/27/00


IT CORPORATION
A Member of The IT Group

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 16-072500-QST

Page 1 of 2

Project Number: 783149

Samples Shipment Date: 25 JUL 2000

Bill To: Duane Nielsen

312 Directors Drive

Knoxville

TN 37923

Project Name: Fort McClellan, SAD TERC

Lab Destination: QUANTERRA - TAMPA

Sample Coordinator: Oliver Allen

Lab Contact: Michelle Lersch

Report To: Duane Nielsen

312 Directors Drive

Knoxville

TN 37923

Turnaround Time: *48 hour
Turn*

Project Contact: Randy McBride

Carrier/Waybill No.: Fed Ex/790866030598

Special Instructions: NONE

Possible Hazard Identification:

Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal:

Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

1. Relinquished By *[Signature]*
(Signature/Affiliation)

Date: *25 July 00*
Time: *1610*

1. Received By *Coral Mc hulty*
(Signature/Affiliation)

Date: *7/26/00*
Time: *1000*

2. Relinquished By
(Signature/Affiliation)

Date:
Time:

2. Received By
(Signature/Affiliation)

Date:
Time:

3. Relinquished By
(Signature/Affiliation)

Date:
Time:

3. Received By
(Signature/Affiliation)

Date:
Time:

Comments: NONE *48 hour Turn*

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	File CID	Condition On Receipt
LD0008	UST-16A1-CS06-CS-LD0008-REG	25 JUL 2000	13:30	5 g EnCore	3	None except cool to 4 C	BTEX by 8021B	N	
LD0008	UST-16A1-CS06-CS-LD0008-REG	25 JUL 2000	13:30	8 oz CWM	1	None except cool to 4 C	PAH's by 8310	N	
LD0009	UST-16A1-CS07-CS-LD0009-REG	25 JUL 2000	13:45	5 g EnCore	3	None except cool to 4 C	BTEX by 8021B	N	
LD0009	UST-16A1-CS07-CS-LD0009-REG	25 JUL 2000	13:45	8 oz CWM	1	None except cool to 4 C	PAH's by 8310	N	
LD0015	UST-16A2-CS06-CS-LD0015-REG	25 JUL 2000	08:45	5 g EnCore	3	None except cool to 4 C	BTEX by 8021B	N	
LD0015	UST-16A2-CS06-CS-LD0015-REG	25 JUL 2000	08:45	8 oz CWM	1	None except cool to 4 C	PAH's by 8310	N	
LD0016	UST-16A2-CS07-CS-LD0016-REG	25 JUL 2000	09:00	5 g EnCore	3	None except cool to 4 C	BTEX by 8021B	N	
LD0016	UST-16A2-CS07-CS-LD0016-REG	25 JUL 2000	09:00	8 oz CWM	1	None except cool to 4 C	PAH's by 8310	N	


ITT CORPORATION
A Member of The IT Group

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 16-072500-QST

Page 2 of 2

Sample No	Sample Name	Sample Date	Sample Time	Container	Preservative	Requested Testing Program	File	CID	Condition On Receipt
LD8001	UST-16A1-SP01-SP-LD8001-REG	25 JUL 2000	14:00	8 oz CWM	1	None except cool to 4 C	Deisel Range Organics by 8015B	N	
LD8001	UST-16A1-SP01-SP-LD8001-REG	25 JUL 2000	14:00	5 g EnCore	3	None except cool to 4 C	Gasoline Range Organics by 8015B	N	
LD8001	UST-16A1-SP01-SP-LD8001-REG	25 JUL 2000	14:00	8 oz CWM	1	None except cool to 4 C	Paint Filter	N	
LD8002	UST-16A2-SP01-SP-LD8002-REG	25 JUL 2000	09:15	5 g EnCore	3	None except cool to 4 C	Gasoline Range Organics by 8015B	N	
LD8002	UST-16A2-SP01-SP-LD8002-REG	25 JUL 2000	09:15	8 oz CWM	1	None except cool to 4 C	Lead by 6010B, Paint Filter	N	
LD8002	UST-16A2-SP01-SP-LD8002-REG	25 JUL 2000	09:15	8 oz CWM	1	None except cool to 4 C	Deisel Range Organics by 8015B	N	

STL KNOXVILLE

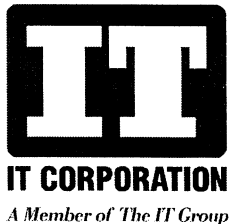
SAMPLE LOG-IN (LOT SUMMARY) REVIEW CHECKLIST

CLIENT: ITKno PROJECT: Ftme Lot No.: HOG260167

TO BE COMPETED BY PROJECT MANAGER:

- | | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|
| 1. Client Documents (Request for Analysis/Chain of Custody): | YES | NO | NA |
| a. Was QuanTIMS lot number documented on all paperwork? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Was RFA/COC signed upon receipt, including date/time? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Is preservative check (pH) noted on RFA/COC? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Is cooler temperature & custody seal condition noted on COC? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Log-in (Lot Folder) Review: | YES | NO | NA |
| a. Do client IDs on Client Summaries match RFA/COC? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Were tests/parameters assigned correctly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Were correct analytical and report due dates assigned? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Has the correct fax due date been assigned to the lot? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Is the correct report format noted in the lot summary? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Is percent moisture logged for samples requiring this analysis? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Are client assigned QC samples properly defined? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Contract/Subcontract Review: | YES | NO | NA |
| a. Is there a contract number or PO for this work? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. If the purchase order number is given, is it noted in Lot header? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. If samples were subcontracted, was copy of COC in folder? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. SDG Review: | YES | NO | NA |
| a. If SDG is required, is SDG form in Lot folder? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Is SDG number noted in Lot header & sample comments? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. If SDG is complete, has the due date been revised & marked closed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Checklist Review: | YES | NO | NA |
| a. Has Sample Receipt Checklist been filled-out? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Was there a CUR? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Were all issues resolved? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

LOT FOLDER REVIEWED BY:  DATE: 7/26/00



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 16-072500-QSK
Page 1 of 1

Project Number: 783149	Samples Shipment Date: 26 JUL 2000	Bill To: Duane Nielsen
Project Name: Fort McClellan, SAD TERC	Lab Destination: Quanterra Environmental Services - Knoxville	312 Directors Drive
Sample Coordinator: Oliver Allen	Lab Contact: John Reynolds	Knoxville TN 37923
Turnaround Time: 48 hours	Project Contact: Randy McBride	Report To: Duane Nielsen
	Carrier/Waybill No.: Quality Express/Courier	312 Directors Drive
		Knoxville TN 37923

Special Instructions: None			
Possible Hazard Identification:		Sample Disposal:	
Non-hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input checked="" type="checkbox"/>		Return to Client <input type="checkbox"/> Disposal by Lab <input checked="" type="checkbox"/> Archive (mos.)	
1. Relinquished By	Date: 7-26-00	1. Received By	Date: 7-26-00
(Signature/Affiliation) <i>DeLoe</i>	Time: 1330	(Signature/Affiliation) <i>Robert E. Myers</i>	Time: 13:30
2. Relinquished By	Date: 7-26-00	2. Received By	Date: 7-26-00
(Signature/Affiliation) <i>Robert E. Myers</i>	Time: 18:20	(Signature/Affiliation) <i>Am... ..</i>	Time: 18:20
3. Relinquished By	Date:	3. Received By	Date:
(Signature/Affiliation)	Time:	(Signature/Affiliation)	Time:
Comments: None 48 hour Turn <div style="text-align: right;"> <i>Rec'd Temp 2°C</i> <i>25/26/27 Custody seals intact</i> <i>D.F. 7-26-00</i> </div>			

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	File CID	Condition On Receipt
LD0008	UST-16A1-CS06-CS-LD0008-REG	25 JUL 2000	13:30	8 oz CWM	1	None except cool to 4 C	Lead by 6010B	N	
LD0009	UST-16A1-CS07-CS-LD0009-REG	25 JUL 2000	13:45	8 oz CWM	1	None except cool to 4 C	Lead by 6010B	N	
LD0015	UST-16A2-CS06-CS-LD0015-REG	25 JUL 2000	08:45	8 oz CWM	1	None except cool to 4 C	Lead by 6010B	N	
LD0016	UST-16A2-CS07-CS-LD0016-REG	25 JUL 2000	09:00	8 oz CWM	1	None except cool to 4 C	Lead by 6010B	N	
LD8001	UST-16A1-SP01-SP-LD8001-REG	25 JUL 2000	14:00	8 oz CWM	1	None except cool to 4 C	Lead by 6010B	N	

UST16A02 Analytical Report	1
Sample Receipt Documentation.....	16
Invoice	20
Total # of Pages	20

**SEVERN
TRENT
SERVICES**

STL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947

Tel: 865-291-3000
Fax: 865-584-4315
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 783149

**FTMC
SDG #: UST16A02**

Duane Nielsen

**IT Corp - Ft. McClellan
312 Directors Drive
Knoxville, TN 37923**

SEVERN TRENT LABORATORIES, INC.



**John Reynolds
Project Manager**

August 1, 2000

SAMPLE SUMMARY

UST16A02 : H0G270104

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DGVVM	001	LD0008	07/25/00	13:30
DGVVT	002	LD0009	07/25/00	13:45
DGVVV	003	LD0015	07/25/00	13:45
DGVW0	004	LD0016	07/25/00	08:45
DGVW1	005	LD8001	07/25/00	14:00

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

SDG SAMPLE SUMMARY REPORT

UST16A02

IT CORP - FT. MCCLELLAN 00394097

LOT-SAMPLE #	QC	RECEIPT		CLIENT SAMPLE ID
		DATE		
H0G270104-001		07/26/00	LD0008	
H0G270104-001	D	07/26/00	LD0008	
H0G270104-001	S	07/26/00	LD0008	
H0G270104-002		07/26/00	LD0009	
H0G270104-003		07/26/00	LD0015	
H0G270104-004		07/26/00	LD0016	
H0G270104-005		07/26/00	LD8001	

ANALYTICAL METHODS SUMMARY

UST16A02

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
Percent Moisture	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

PROJECT NARRATIVE

UST16A02

The results reported herein are applicable to the samples submitted for analysis only.

The original chain of custody documentation is included with this report.

Sample Receipt

There were no sample receipt issues noted.

Quality Control

All holding times and QC criteria were met.

This report shall not be reproduced except in full, without the written approval of the laboratory.

STL Knoxville (formerly Quanterra Incorporated), Knoxville Laboratory maintains the following certifications, approvals and accreditations: California ELAP Cert. #2100, Connecticut DPH Cert. #PH-0233, Florida DOH SDWA Cert. #87293, Florida DOH Environmental Water Cert. #E87177, Florida DEP CompQAP #880566, Georgia EPD by US EPA Region IV, Hawaii DOH, Kentucky DEP Lab ID #90101, Maryland DHMH Cert. #277, Massachusetts Cert. #M-TN009, New York DOH Lab #10781, North Carolina DEHNR Cert. #64, North Dakota DOHCL Cert. #R-134, Ohio EPA VAP #CL0059, Oklahoma DEQ ID #9415, South Carolina DHEC Lab ID #84001, Tennessee DOH Lab ID #02014, Tennessee DEC UST, Utah DOH Cust. ID QUAN#, Virginia DGS Lab ID #00165, Washington DOE Lab #C120, Wisconsin DNR Lab ID #998044300, AALA Cert. #486.01, US Army Corps of Engineers, Naval Facilities Engineering Service Center, and USDA Soil Permit #S-3929. This list of approvals is subject to change and does not imply that laboratory certification is available for all parameters reported in this environmental sample data report.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0008

TOTAL Metals

Lot-Sample #...: H0G270104-001

Matrix.....: SOLID

Date Sampled...: 07/25/00

Date Received...: 07/26/00

% Moisture.....: 8.6

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #...: 0210131						
Lead	15.9	0.33	mg/kg	SW846 6010B	07/28/00	DGVVM102
		Dilution Factor: 1		Analysis Time...: 15:48	MDL.....: 0.13	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0009

TOTAL Metals

Lot-Sample #....: H0G270104-002

Matrix.....: SOLID

Date Sampled....: 07/25/00

Date Received...: 07/26/00

% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
Prep Batch #....: 0210131						
Lead	18.8	0.36	mg/kg	SW846 6010B	07/28/00	DGVVT102
		Dilution Factor: 1		Analysis Time...: 16:16	MDL.....: 0.14	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0015

TOTAL Metals

Lot-Sample #....: HOG270104-003

Matrix.....: SOLID

Date Sampled....: 07/25/00

Date Received...: 07/26/00

% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....: 0210131						
Lead	18.2	0.36	mg/kg	SW846 6010B	07/28/00	DGVVV102
		Dilution Factor: 1		Analysis Time..: 16:21	MDL.....: 0.14	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD0016

TOTAL Metals

Lot-Sample #....: H0G270104-004

Matrix.....: SOLID

Date Sampled...: 07/25/00

Date Received...: 07/26/00

% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 0210131						
Lead	60.0	0.37	mg/kg	SW846 6010B	07/28/00	DGVW0102
		Dilution Factor: 1		Analysis Time...: 16:25	MDL.....: 0.15	

NOTE(S) :

Results and reporting limits have been adjusted for dry weight.

IT CORP - FT. MCCLELLAN

Client Sample ID: LD8001

TOTAL Metals

Lot-Sample #...: H0G270104-005

Matrix.....: SOLID

Date Sampled...: 07/25/00

Date Received...: 07/26/00

% Moisture.....: 10

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 0210131						
Lead	13.7	0.34	mg/kg	SW846 6010B	07/28/00	DGVW1102
		Dilution Factor: 1		Analysis Time...: 16:30	MDL.....: 0.13	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: UST16A02

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
MB Lot-Sample #: H0G280000-131 Prep Batch #... : 0210131						
Lead	ND	0.30	mg/kg	SW846 6010B	07/28/00	DH0E9101
		Dilution Factor: 1				
		Analysis Time...: 15:39				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: UST16A02
 Date Sampled...: 07/25/00

Date Received...: 07/26/00

Matrix.....: SOLID

PARAMETER	AMOUNT	SAMPLE AMT	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
-----------	--------	------------	--------------	-----------------	-------	----------------	-----	--------	----------------------------	--------------

MS Lot-Sample #: H0G270104-001 Prep Batch #...: 0210131

Lead

15.9	54.7	64.5	mg/kg	89		SW846	6010B	07/28/00	DGVVM103
15.9	54.7	65.7	mg/kg	91	1.8	SW846	6010B	07/28/00	DGVVM104

Dilution Factor: 1

Analysis Time...: 15:53

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: UST16A02
 Date Sampled...: 07/25/00

Date Received...: 07/26/00

Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
-----------	---------------------	--------------------	---------------	--------	-------------------------------	-----------------

MS Lot-Sample #: H0G270104-001 Prep Batch #....: 0210131

Lead	89	(75 - 125)		SW846 6010B	07/28/00	DGVVM103
	91	(75 - 125) 1.8	(0-20)	SW846 6010B	07/28/00	DGVVM104

Dilution Factor: 1

Analysis Time...: 15:53

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: UST16A02

Matrix.....: SOLID

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCNT</u> <u>RECVRY</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK</u> <u>ORDER #</u>
------------------	-------------------------------	----------------------------------	--------------	--------------------------------	---------------	---	-------------------------------

LCS Lot-Sample#: H0G280000-131 Prep Batch #...: 0210131

Lead 50.0 48.3 mg/kg 97 SW846 6010B

07/28/00

DH0E9102

Dilution Factor: 1

Analysis Time..: 15:44

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: UST16A02

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#:	H0G280000-131	Prep Batch #...:	0210131		
Lead	97	(80 - 120)	SW846 6010B	07/28/00	DH0E9102
		Dilution Factor: 1			
		Analysis Time...: 15:44			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Sample Delivery Group
Assignment Form
SDG# UST16A02

*	DATE REC'D	LOT#	CLIENT ID	VOA	PAH	PEST	EXP	MET	PCB	PH	DRO	GRO	PAINT
				8021B	8310	8081A	8330	6010B	8082	9045	8015	8015	FILTER
1	7/26/00	H0G270104	LD0008					X					
2			LD0009					X					
3			LD0015					X					
4			LD0016					X					
5			LD8001					X					
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

NC = NORTH CANTON
 T = STL TAMPA
 D= STL DENVER
 WS = STL WEST SACRAMENTO
 P = PITTSBURGH
 IT = IT CORP KNOX

MATRIX: SOIL
 ANALYTICAL DUE: 7-31-00
 REPORT DUE: 8-7-00
 CLOSED? YES

8/1/008:28 AM



IT CORPORATION

A Member of The IT Group

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 16-072500-QSK

Page 1 of 1

Project Number: 783149

Samples Shipment Date: 26 JUL 2000

Bill To: Duane Nielsen

Project Name: Fort McClellan, SAD TERC

Lab Destination: Quanterra Environmental Services - Knoxville

312 Directors Drive

Knoxville

TN 37923

Sample Coordinator: Oliver Allen

Lab Contact: John Reynolds

Report To: Duane Nielsen

312 Directors Drive

Knoxville

TN 37923

Turnaround Time: 48 hours

Project Contact: Randy McBride

Carrier/Waybill No.: Quality Express/Courier

Special Instructions: None

Possible Hazard Identification:

Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal:

Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

1. Relinquished By
(Signature/Affiliation)

DeLoe

Date: 7-26-00

Time: 1330

1. Received By
(Signature/Affiliation)

Robert E. Myers

Date: 7-26-00

Time: 13:30

2. Relinquished By
(Signature/Affiliation)

Robert E. Myers

Date: 7-26-00

Time: 18:20

2. Received By
(Signature/Affiliation)

DM Washburn

Date: 7-26-00

Time: 18:20

3. Relinquished By
(Signature/Affiliation)

Date:

Time:

3. Received By
(Signature/Affiliation)

Date:

Time:

Comments: None 48 hour Turn

Rec'd Temp 2°C
Custody seals intact
D.F. 7-26-00

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	File	CID	Condition On Receipt
LD0008	UST-16A1-CS06-CS-LD0008-REG	25 JUL 2000	13:30	8 oz CWM	1	None except cool to 4 C	Lead by 6010B	N		
LD0009	UST-16A1-CS07-CS-LD0009-REG	25 JUL 2000	13:45	8 oz CWM	1	None except cool to 4 C	Lead by 6010B	N		
LD0015	UST-16A2-CS06-CS-LD0015-REG	25 JUL 2000	08:45	8 oz CWM	1	None except cool to 4 C	Lead by 6010B	N		
LD0016	UST-16A2-CS07-CS-LD0016-REG	25 JUL 2000	09:00	8 oz CWM	1	None except cool to 4 C	Lead by 6010B	N		
LD8001	UST-16A1-SP01-SP-LD8001-REG	25 JUL 2000	14:00	8 oz CWM	1	None except cool to 4 C	Lead by 6010B	N		

STL KNOXVILLE

SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Page 1 of _____

CLIENT: IT Corp PROJECT: FT McClellan Lot No.: HOG270104

TO BE COMPLETED BY SAMPLE RECEIPT ASSOCIATE:

- | | YES | NO | NA |
|--|-------------------------------------|--------------------------|-------------------------------------|
| 1. Sample Receipt: | | | |
| a. Do sample container labels match COC? (IDs, Dates, Times) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Is the cooler temperature within acceptance limits? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Were samples received with correct preservative (excluding Encore)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Were custody seals present/intact on cooler and/or containers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Were all of the samples listed on the COC received? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Were all of the sample containers received intact? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Were containers received for VOAs received without headspace? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h. Were samples received in the appropriate containers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Did you check for residual chlorine, if necessary? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j. Were samples received within 1/2 of the (QAMP) holding time? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Were samples screened for radioactivity? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| l. Were client's sample documents (RFA/COC) received? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Has the RFA/COC been relinquished? (Signed, Dated, Timed) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| n. Are test/parameters listed for each sample? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o. Is the matrix of the samples noted? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| p. Is the date/time of sample collection noted? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| q. Is the client and project name/No. identified? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SAMPLE RECEIVING ASSOCIATE: Daniel D. Flaws DATE: 7/27/00

TO BE COMPLETED BY PROJECT MANAGER :

- | | YES | NO | NA |
|--|-------------------------------------|--------------------------|--------------------------|
| 1. Project manager "Sample Greet": | | | |
| a. Quote number to be logged-in under <u>25474</u> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Informed Login associates of special instructions ?
<u>526# JST 14003 FAX Due 7/31</u> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. If custody seals were missing/not intact, was client notified? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

PROJECT MANAGER : _____

DATE: 7/27/00

Client Sample ID	Analysis Requested	Condition (see legend)	Comments/Action

☐ Client informed on _____ by _____. Person contacted: _____.☐ Noted actions in comments section above.☐ No action necessary; process as is.

Project Manager: _____ Date: _____

8/31

9/7


STL KNOXVILLE

SAMPLE LOG-IN (LOT SUMMARY) REVIEW CHECKLIST

CLIENT: ITKno PROJECT: FTMC Lot No.: H06270104

TO BE COMPETED BY PROJECT MANAGER:

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Client Documents (Request for Analysis/Chain of Custody): | YES | NO | NA |
| a. Was QuanTMS lot number documented on all paperwork? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Was RFA/COC signed upon receipt, including date/time? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Is preservative check (pH) noted on RFA/COC? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Is cooler temperature & custody seal condition noted on COC? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Log-in (Lot Folder) Review: | YES | NO | NA |
| a. Do client IDs on Client Summaries match RFA/COC? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Were tests/parameters assigned correctly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Were correct analytical and report due dates assigned? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Has the correct fax due date been assigned to the lot? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Is the correct report format noted in the lot summary? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Is percent moisture logged for samples requiring this analysis? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Are client assigned QC samples properly defined? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Contract/Subcontract Review: | YES | NO | NA |
| a. Is there a contract number or PO for this work? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. If the purchase order number is given, is it noted in Lot header? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. If samples were subcontracted, was copy of COC in folder? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. SDG Review: | YES | NO | NA |
| a. If SDG is required, is SDG form in Lot folder? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Is SDG number noted in Lot header & sample comments? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. If SDG is complete, has the due date been revised & marked closed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Checklist Review: | YES | NO | NA |
| a. Has Sample Receipt Checklist been filled-out? | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Was there a CUR? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Were all issues resolved? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

LOT FOLDER REVIEWED BY:  DATE: 7/28/10